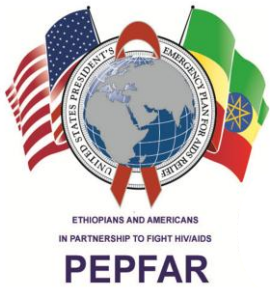

PRIVATE HEALTH SECTOR PROGRAM

TB SUSPECT IDENTIFICATION AND REFERRAL SERVICES IN PRIVATE LOWER CLINICS AND DRUG OUTLETS: ASSESSING A PILOT PROGRAM IN ETHIOPIA

March 2013

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CONTENTS

LIST OF TABLES

LIST OF FIGURES

ACRONYMS

AFB	Acid Fast Bacillus
CDR	Case Detection Rate
DOTS	Directly Observed Therapy Short Course
FMOH	Federal Ministry of Health
HCT	HIV Counseling and Testing
PPM	Public Private Mix
PEPFAR	President's Emergency Plan for AIDS Relief
PHSP	Private Health Sector Program
RHB	Regional Health Bureau
SNNP	Southern Nations, Nationalities, and Peoples
SPSS	Statistical Package for Social Sciences
THO	Town Health Office
TB	Tuberculosis
USAID	United States Agency for International Development

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EXECUTIVE SUMMARY

The United States Agency for International Development (USAID)-funded Private Health Sector Program (PHSP) in Ethiopia is currently supporting the implementation of Tuberculosis Directly Observed Treatment, Short-course (TB-DOTS) and HIV counseling and testing (HCT) services in 212 private and 10 workplace clinics in Amhara, Harari, Oromia, Southern Nations, Nationalities, and Peoples (SNNP), and Tigray Regions, as well as Addis Ababa and Dire Dawa City Administrations. In its third year of the project, PHSP piloted a structured program to increase standardized TB suspect identification and referral services in 45 private lower clinics and 30 drug outlets in two regions, Amhara and Oromia, over a period of nine months.

At the end of the pilot period, PHSP in collaboration with the respective Regional Health Bureaus (RHBs) conducted a rapid assessment of this pilot program to collect baseline data and determine whether to the evidence was sufficient to justify expansion of this effort in year four of the project. The objective of the assessment was to assess the overall performance of the lower clinics and drug outlets in TB suspect identification and referral and propose a set of recommendations for program replication and expansion to additional private sector facilities.

The rapid assessment took place between 15 September and 1 October, 2012. The project initially identified 75 facilities for the pilot, 45 lower clinics and 30 drug outlets. However, seven of these facilities were dropped from the assessment because they were either closed or had stopped functioning. Only the remaining 68 facilities were assessed.

Almost all of the service providers and owners of the pilot lower clinics and drug outlets responded that they believe this service would benefit patients and that they were interested in continuing to provide the TB identification and referral service. During the nine month pilot period, a total of 424 cases of suspected TB were identified and referred in the 68 pilot facilities (41 lower clinics and 27 drug outlets). Feedback on the outcome of the diagnosis of the suspected cases was obtained for only 89 (24%) of the cases showing a low feedback rate. Of those suspects for whom feedback was obtained, 73 (82%) were confirmed to have some form of TB suggesting that these types of facilities can play a significant role in suspect identification and referral for early diagnosis and treatment of TB cases.

The results of the assessment also show that lower clinics contributed to 85% of all cases identified and referred while drug outlets contributed only 15% of all cases, demonstrating that lower clinics are more effective in identifying and referring TB cases than drug outlets.

The assessment collected data on the diagnostic outcome, i.e., Acid Fast Bacillus (AFB) test results and acceptance of referred suspected cases of TB. Low feedback rates from referral-accepting diagnostic facilities and non-acceptance of referred suspected cases by some of these were some of the major challenges identified by the program.

Overall, the assessment revealed that TB suspect case identification and referral service in lower clinics and drug outlets are effective for early identification and diagnosis of TB cases, leading to improved case detection and decreased diagnostic and treatment delays. Based on the rapid assessment results, the assessors recommended expansion of nationally standardized TB suspect case identification and referral service protocols in additional lower clinics rather than drug outlets, since referrals from drug outlets were less effective in referring suspected cases of TB than were the lower clinics.

1. INTRODUCTION

TB continues to have substantial impact on both morbidity and mortality in Ethiopia today. To help curb the problem, the current international and national strategies are to engage all health care providers, both public and private, in TB control and prevention activities. In Ethiopia, the private sector is already a major actor in the health care delivery system and as such is currently playing a significant role in terms of prevention and control of TB nationwide.

Ethiopia is one of the 22 highest TB burden countries in the world. According to the World Health Organization (WHO) Global TB Report 2011, there were an estimated 220,000 cases (261 per 100,000) of TB in Ethiopia in 2010. According to the same report the prevalence of TB was estimated to be 330,000 (394 per 100,000). There were an estimated 29,000 deaths (35 per 100,000) due to TB, excluding HIV related deaths, in Ethiopia during the same period.

In the Ethiopian comprehensive plan for TB, one major objective is to increase the Case Detection Rate (CDR). To achieve this along with other major anti-TB objectives, building the capacity of Health Extension Workers (HEWs) to mobilize the community for early TB diagnosis and active TB case finding (to screen all suspected cases of TB and start community DOTS service in each kebele/village) will be given priority by the FMOH. PPM-DOTS is another strategy being applied, with the goal of decreasing morbidity, mortality and reducing drug resistant TB by involving all public and private health facilities in providing standardized TB-DOTS.

PHSP is currently supporting the implementation of TB-DOTS and HCT services in 212 private and 10 work place clinics in Amhara, Oromia, Harari, SNNP and Tigray Regions and Addis Ababa and Dire Dawa City Administrations. Using different strategies, the project has supported the private and public sectors in policy formulation, capacity building, logistics and supplies, quality assurance, service delivery, and monitoring. As a five-year project target, the plan is to include 250 lower clinics, rural drug vendors, drug stores and pharmacies in TB case detection and referral networking. PHSP believes that involving the lower clinics and rural drug vendors will assist in increasing the case detection rates of pulmonary TB cases. PHSP will also assist in improving feedback mechanisms between the suspect referring facilities (lower clinics and drug outlets) and the diagnostic facilities for patient referral to a facility preferred by the patient to ensure that no TB case goes without treatment.

In line with the objective of improving TB case detection and case management outcomes in Ethiopia, PHSP started a pilot TB suspect identification and referral service by recruiting 45 lower clinics and 30 drug outlets in two high TB burden regions in 2012, Oromia and Amhara. Based on the recommendations of the rapid assessment conducted in 2010 by PHSP in collaboration with respective Town Health Offices, 75 facilities were selected. Following selection of the facilities, PHSP provided two-day orientation training on the basics of TB for providers working in the selected facilities. In addition, PHSP provided basic recording and reporting materials on TB suspect identification and referral at the time of service initiation which immediately followed the training of providers. Subsequently, PHSP conducted supportive supervision and other necessary follow-up visits to these facilities jointly with the respective Town Health Offices for a period of nine months.

To determine the effect of, lessons learned from, and implications for possible expansion of the pilot to other lower clinics and/or drug outlets in PHSP supported regions, PHSP organized and conducted an assessment of the pilot after nine months of implementation in the two pilot regions from 15 September 2012 through 1 October 2012.

2. OBJECTIVES OF THE ASSESSMENT

The main goal of the assessment was to assess the overall performance of the pilot lower clinics and drug outlets involved in TB suspect case identification and referral service during a nine month pilot period and based on the findings and recommendations determine whether there is sufficient evidence to expand this intervention.

The objectives were to:

1. Determine the effectiveness of lower clinics and drug outlets in identifying and referring suspected cases of TB
2. Assess the referral system between the lower clinics and drug outlets and the diagnostic referral facilities
3. Identify major gaps, challenges, and lessons learned for future consideration.

3. METHODOLOGY

3.1 DESIGN OF THE ASSESSMENT

The project team conducted a rapid cross-sectional assessment in the pilot facilities using a prepared data collection tool designed by the PHSP technical team. The assessment tool incorporated both quantitative and qualitative methods and is included in Annex A.

3.2 STUDY PARTICIPANTS

The assessment involved 68 of the existing 75 functional pilot facilities. Seven of these facilities were dropped from the assessment because they were either closed or had stopped functioning.

The respondents in the assessment were facility owners as well as paid staff working in the pilot facilities.

3.3 DATA COLLECTION AND ANALYSIS

The assessment team was comprised of four PHSP staff members who collected data in their respective regions during September 2012 using the prepared questionnaire. The quantitative data were entered centrally using the Statistical Package for Social Sciences (SPSS). Qualitative information was categorized and analyzed according to different response themes to facilitate interpretation and triangulation.

PHSP staff analyzed and wrote the report (experts from the TB/HIV program and the monitoring and assessment team) using an agreed-upon outline.

4. RESULTS AND DISCUSSION

The assessment involved 41 lower clinics and 27 drug outlets (19 pharmacies and eight drug vendors). The findings and discussion cover: human resources and staffing, client volume, referral networks/feedback mechanisms, and monitoring, and program challenges.

4.1 HUMAN RESOURCES: STAFFING AND TRAINING

A structured interview questionnaire was used to gather data related to the human resources pool. The results of the data are summarized in Table 1 below. According to the assessment findings, most providers in the pilot lower clinics were nurses (56 or 82%) while only 12 (18%) of providers in the pilot lower clinics were health officers. At the same time most of the service providers in drug outlets were pharmacy technicians (47 or 59%) followed by pharmacists (26 or 34%) and only seven (9%) were druggists. According to the respondents, 49 (72%) of the providers currently working in the lower clinics and drug outlets were oriented on the basics of TB at the start of the pilot, whereas 19 (28%) were not oriented or trained on basics of TB.

TABLE 1: NUMBER OF STAFF BY JOB TITLE IN THE ASSESSED FACILITIES

Lower Clinics

Provider Type	Number	Percent
Nurse	56	82
Health Officer	12	18
Total	68	100

Drug Outlets

Pharmacist	**26**	**34**
Pharmacy Technician	47	59
Druggist	7	9
Total	80	100

The assessment results also showed that 65 (96%) of the 68 assessed facilities were owned by health professionals and not business people.

At the start of the program, 61 of these facilities sent a participant to the PHSP two-day orientation training on the basics of TB case management and 49 (80%) were available in their facilities during the assessment period indicating an apparent 20% turnover of trained staff.

4.2 SUPPORTIVE SUPERVISION AND RECORDING AND REPORTING

At the beginning of the pilot period and after the orientation training on the basics of TB was provided by PHSP, the 75 pilot facilities were provided with standardized TB recording and reporting formats. Onsite orientation was provided by PHSP field program staff for those facilities which did not participant in the initial basic orientation. The recording and reporting formats provided for the pilot facilities were *TB Suspect Registration Log Book and TB Suspect Referral Forms*. According to the assessment, almost all of the assessed facilities had both the registration log book and the referral forms and were using them at the time of the assessment.

According to the respondents, quarterly supportive supervision visits were conducted either jointly with the Town/Woreda Health Office officials or separately by PHSP or the Town Health Office during the pilot implementation period. This was designed to solve challenges during program implementation.

4.3 TB SUSPECT IDENTIFICATION AND REFERRAL SERVICE

For the purpose of the pilot, a referral system that included a feedback mechanism was established between the referring pilot facilities and the diagnosing facilities. This was designed to obtain the exact number of suspected cases that were referred and diagnosed with TB or confirmed not to have TB. The data from this mechanism were analyzed to indicate the effectiveness of the pilot clinics in terms of identifying true TB cases.

PHSP used the existing FMOH TB suspect case identification referral format used by HEWs with slight modifications made specifically for this pilot. PHSP prepared the format using a booklet that had included carbon copy pages and a detachable lower part to be filled by the diagnosing facility for feedback purposes.

A one day workshop was conducted in three major towns where participants from the pilot facilities and major referral receiving facilities were brought together and oriented on the referral format and on the pilot as a whole. Referral receiving facilities, both public and private, were instructed to fill the detachable part of the referral form and give this to the suspected case of so that he/she would take it to the original referring facility. In addition, PHSP provided each of the pilot facilities with a log book to document information about the suspected cases including the patient's address, age, sex and particularly the name of diagnostic facility to which he/she was referred. The log book also had one column to document feedback whenever this was received.

At the time of the assessment, a total of 424 suspected cases of TB (48% were female) had been identified and referred by 55 of the 68 assessed facilities as shown in Table 2. Thirteen of the pilot facilities didn't identify and refer suspected cases of TB during the pilot period of which nine were drug outlets. At the same time, 37 of 41 lower clinics and 18 of 27 drug outlets identified and referred at least one suspected case of TB during the pilot period.

TABLE 2: NUMBER OF SUSPECTED TB CASES IDENTIFIED AND REFERRED DURING THE PILOT PERIOD, BY SEX

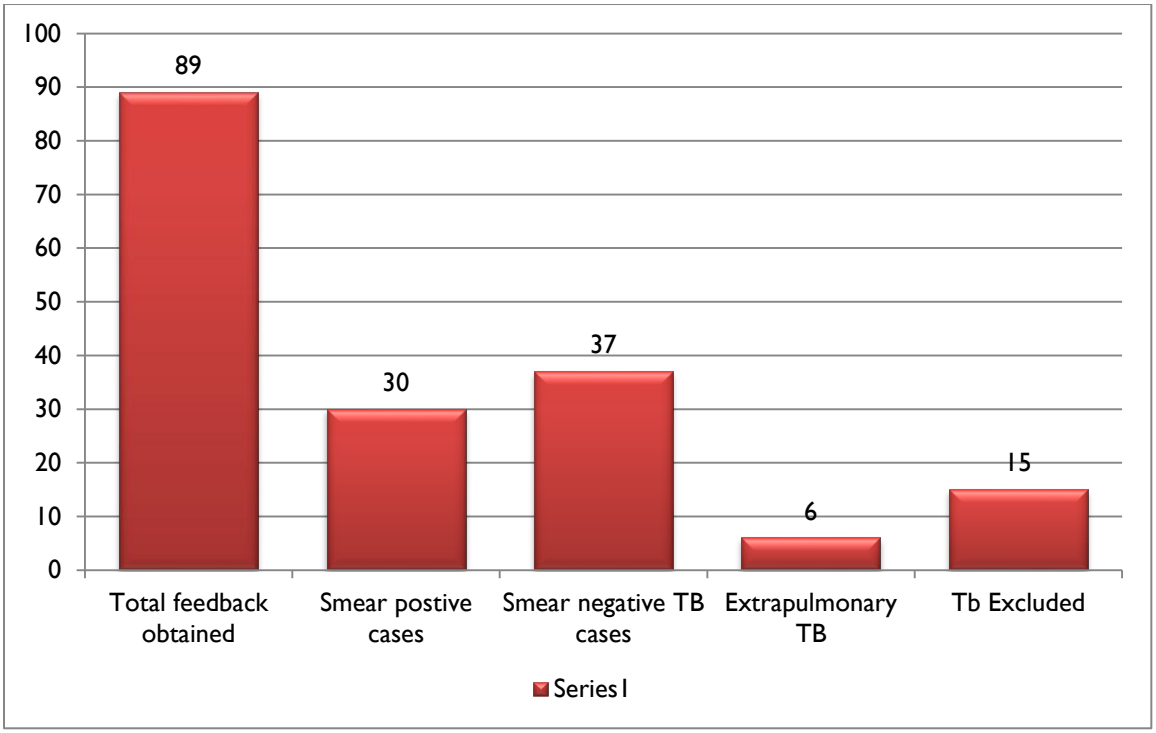
	Male	Female
TB suspects identified	222 (52%)	202 (48%)
TB suspects referred to diagnostic facility	222 (52%)	202(48%)
Feedback obtained	45 (20%)	44 (49%)

As shown in Table 2, referral feedback was obtained from referral-accepting facilities for 89 (23%) of the total suspected TB cases identified and referred during the pilot period. The low referral feedback rate is believed to be because of providers' work overload in the public referral receiving facilities.

It is also believed that not all suspected cases would bring the referral feedback to the referring facilities even if the individual is given feedback. Not all providers in referral receiving facility were aware of the pilot program and special referral mechanism set up even though there was a one-day orientation workshop provided involving staff from the major referral receiving facilities.

According to the feedback obtained from the referral accepting diagnostic facilities, of the 89 feedback responses received, 30 suspected cases were confirmed to be smear positive for TB; 37 were diagnosed to have smear negative pulmonary TB; six were diagnosed to have some form of extra pulmonary TB; and only 15 of the referred suspects were found to have no TB as shown in Figure 1.

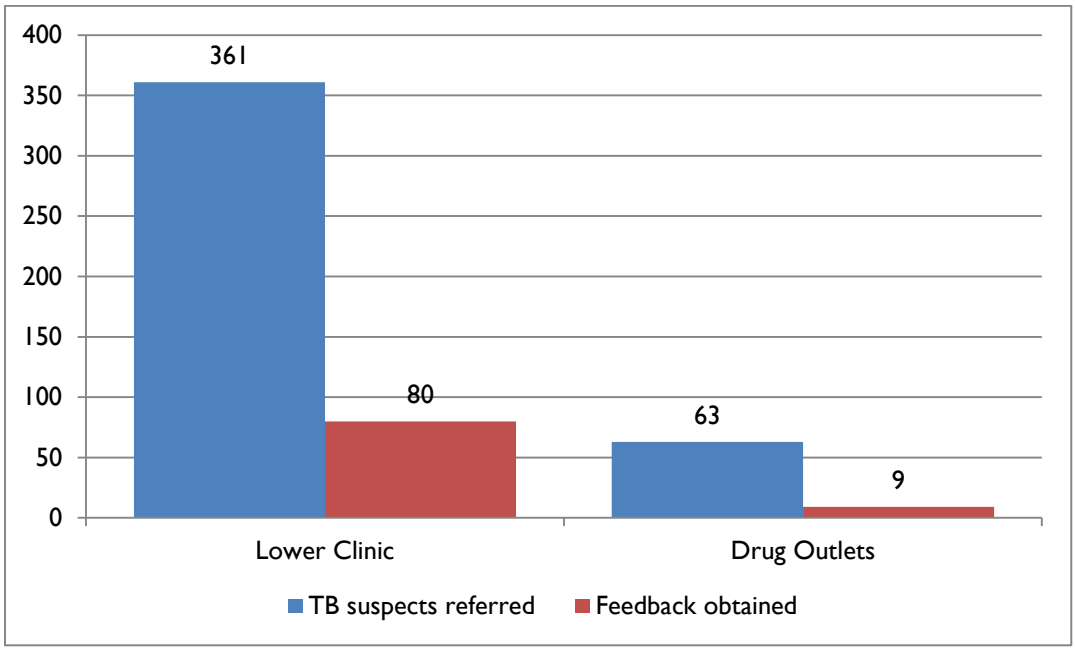
FIGURE1: TOTAL NUMBER OF FEEDBACK RESPONSES OBTAINED ALONG WITH TYPES OF TB DIAGOSIS MADE



Of the 89 suspected cases for whom referral feedback was obtained, 73 (82%) were diagnosed to have some form of TB by the referral receiving facility whereas only 15 (18%) suspected cases were diagnosed not to have TB. This is an indication that lower clinics and drug outlets are highly effective in identifying suspected cases of TB, though feedback was not obtained for all referred suspected cases.

On further analysis of the volume of suspected cases referred from pilot facilities, of the 424 suspected cases identified and referred, 361 (85%) were referred by lower clinics and only 63 (15%) were referred by drug outlets, indicating that lower clinics are more effective in identifying and referring suspected cases of TB than drug outlets. See Figure 2 below.

FIGURE 2: NUMBER OF SUSPECTED CASES OF TB IDENTIFIED AND REFERRED BY TYPE OF FACILITIES DURING THE PILOT PERIOD



4.4 OPINION OF PROVIDERS ON THE BENEFITS OF THE PROGRAM

The majority of respondents mentioned that since the first contact of most coughing patients in the community is either in the lower clinic or drug outlet, involving the lower clinics and drug outlets in identification and referral of suspected TB cases would benefit TB patients in detecting their problem early which would in turn save time, money and even their life. While a significant number of cases are detected early and put on TB medication, this program helps to reduce TB transmission within the family and the community as a whole.

When asked about the benefit of the program to the facilities, the majority of the respondents mentioned that it helped providers working in the facilities to become more aware and knowledgeable about TB, which helped them to improve their infection prevention practices. A significant number also mentioned that they feel satisfied because they are contributing to the national TB control and prevention program as part of their social responsibility. A small number of respondents also reported that this program helped build trust between patients and service providers which actually helped to promote the facility's reputation.

A significant number reported that this program helped to strengthen the relationship between the private and public health facilities as well as with public health officials. It also helped them build a better relationship with the patients and the general community which in turn helps them to sustain their business.

4.5 CHALLENGES OF THE PROGRAM

Based on the information obtained from the health workers delivering the service, most of the respondents stated that they were not receiving feedback information on the status of the suspected cases of TB that were referred to diagnostic referral accepting facilities. However, some of the suspected cases were coming back to the referring facilities to provide oral feedback about their condition as a whole. Normally, the diagnosing facility is expected to complete the referral form (the lower detachable part designed for this purpose) and send back the written outcome to the referring facility.

In particular, providers in the drug outlets reported that lack of consultation rooms in their pharmacy hindered them from conducting detailed discussions and providing counseling to the suspects. Other respondents expressed that some patients resisted referral, for example, patients were not willing to go to the referral accepting health center and/or hospital because the these public facilities are overloaded and the wait time is too long. A few of the respondents also indicated that some patients prefer immediate treatment of their problem and not to be the referred to other facilities. Based on their past experience, some expressed that they would not be welcome by the diagnostic facilities.

5. CONCLUSIONS, RECOMMENDATIONS, AND LESSONS LEARNED

Conclusion

Providers and staff from 68 lower clinics and drug outlets identified 424 suspected cases of TB, and referred these individuals to diagnostic facilities during the nine-month pilot period. The majority (85%) of those referrals were from lower clinics. The contribution of drug outlets was only 15%, indicating that lower clinics are more effective than drug outlets in identifying and referring suspected TB cases. In general, lower clinics and drug outlets are highly effective in correctly identifying suspected TB cases. Seventy-three (82%) of those suspected cases for whom feedback was obtained from the diagnostic facilities were found to have some form of TB (though the feedback rate was low). **Identification of cases at these lower level facilities could have a significant impact on TB prevention and control as early case detection and referral for treatment helps to prevent transmission within communities.**

If all lower clinics in the country were involved in identification and referral of suspected cases, they could have a significant impact on early case detection specifically and on TB control and prevention as a whole. Much remains to be done, however, to raise awareness and acceptance of this new initiative among providers in the receiving diagnostic facilities, so that they will not reject referrals from the lower clinics and drug outlets.

In summary, some of the major challenges faced by this pilot initiative included:

- overburdened public health facilities, which in most cases are the referral-accepting diagnostic facilities;
- lack of feedback received on the diagnostic outcome of referred patients; and
- non-receptive or a non-welcoming approach toward the referred cases of suspected TB from the referral-accepting facilities.

These issues will have to be addressed and resolved before the potential for this approach to TB case detection can be maximized.

Recommendations

Since the number of suspected TB cases identified and referred from drug outlets was minimal compared to the lower clinics, assessment findings suggest that any further expansion of this initiative should prioritize lower clinics. The volume of patients referred overall was fairly low – an average of around one patient per clinic per month. Clearly, however, engaging a greater number of lower clinics in case identification and referral will result in increased case detection in the long run. Streamlining the orientation and training provided to clinic staff to several hours during a one-time visit to each clinic, rather than engaging staff in two days of training in a group setting could reduce the cost of expanding this initiative to other facilities. To improve the referral system, it is recommended that the project conduct a series of orientation and advocacy workshops on TB referrals, involving all health care professionals from both the referring and accepting facilities.

Lessons Learned

This TB suspect identification and referral service is a promising new approach to enhance case detection. The nine-month pilot has shown it to be effective and fairly easily managed. The approach can be scaled up with minimal cost and has the potential to significantly improve TB case detection in Ethiopia.

ANNEX A: FACILITY ASSESSMENT DATA COLLECTION TOOL (QUESTIONNAIRE)

INTRODUCTION

(Greetings) I am here on behalf of the Regional Health Bureau and the Private Health Sector Program to obtain information from your facility on the involvement of lower clinics and drug outlets in TB suspect identification and referral during the pilot phase. PHSP in collaboration with Federal Ministry of Health/Regional Health Bureau is conducting an assessment of 75 lower clinics and drug outlets that participated in TB suspect identification and referral. The purpose of the assessment is to assess the performance and results of the pilot sites in providing this service. The assessment thus, will provide the Ministry, Regional Health Bureau, and the Private Health Sector Program and other key stakeholders with valuable information to use in planning for expanding this service in Ethiopia. We are gathering information from this facility on staffing, type of service offered, number of patients served and the outcomes of the pilot period. Please note that any information you give will not be divulged to anyone else and will only be used for the intended purpose of this assessment.

1. BACKGROUND INFORMATION

Date (DD/MM/YYYY)		
Interviewer's Name:		
Name of Health Facility		
Region		
Zone		
Woreda/Town		
Telephone Number (landline)		
Date the Health Facility Established (MM/ YYYY)		
Owner/Manager of the Health Facility	Health Professional Non-health Personnel	
Level of Health Facility:	1. Lower Clinic	2. Pharmacy 3. Drug Vendor

Interviewee's:

Name	Title and Position	Telephone Number
		Mobile:
		Landline:

2. FACILITY HEALTH HUMAN RESOURCE STATUS

2.1. Total number of full-time health care providers currently practicing at the facility by professional category [Answer by writing total number of staff for each category]

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2. 2. Total number of part-time staff currently practicing at the health facility by category of profession

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3. PATIENT PROFILE AND VOLUME

What is the total number of suspected cases of TB identified and referred during the pilot phase?

I. Number of TB suspects seen during the year_____(by sex)
II. Number of TB suspects referred to diagnostic facility_____(by sex)
III. Number of referred TB suspects for whom feedback is obtained_____
IV. Number of referred TB suspects with feedback result showing TB diagnosis:
    a) Smear positive_____
    b) Smear negative_____
    c) Extra pulmonary_____

4. RECORDING AND REPORTING

Did your facilities have the following standardized registers and formats during the pilot phase?

I. Suspect registration log book a. Yes b. No
II. TB suspect referral forms

5. SUPERVISION

How many times did you receive supervision from the following institutions?

I. Woreda Health Office/Town Health Office
II. Private Health Sector Program

1. Did anyone from your facility received orientation on the basics of TB and TB/HIV? If yes is he/she still working in the facility?

2. What do you think are the major benefits of this program to the patient?

3. What do you think are the major benefits of this program to your facility?

4. What do you think are the major challenges of this program?

Data table for tracing suspects referred to nearby TB diagnostic health facilities (for those suspects for whom feedback is not available).

Name of major nearby TB diagnostic facility where suspects were referred					
Number of suspects referred to the specific diagnostic facility					
Number of patients confirmed to have reached diagnostic facility (Lab AFB register or unit TB register)					
Number of suspects who were confirmed to have TB					